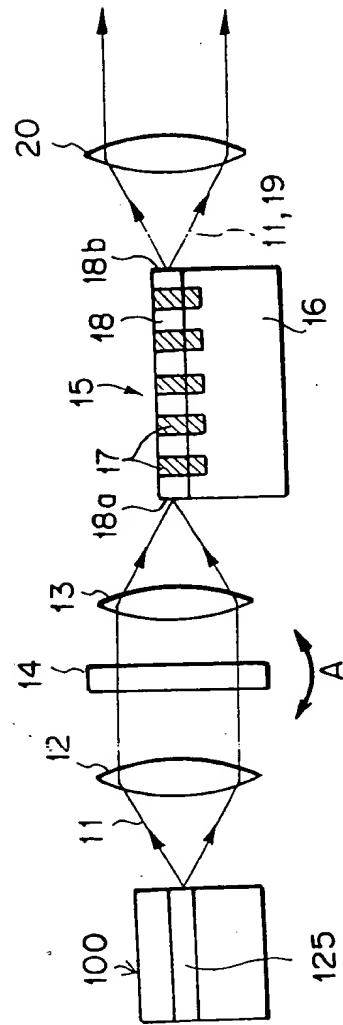


APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

YAKAWA..... 064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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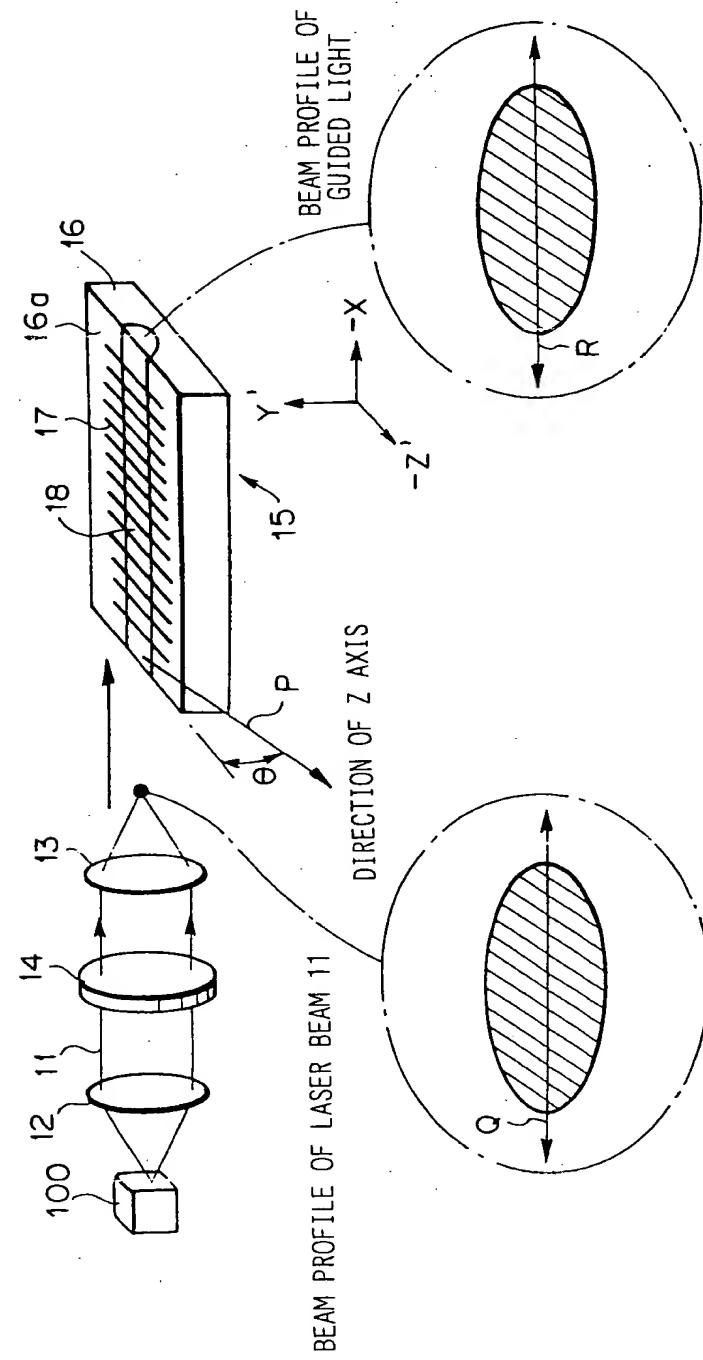
F I G . 1



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA... 064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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F - I G . 2

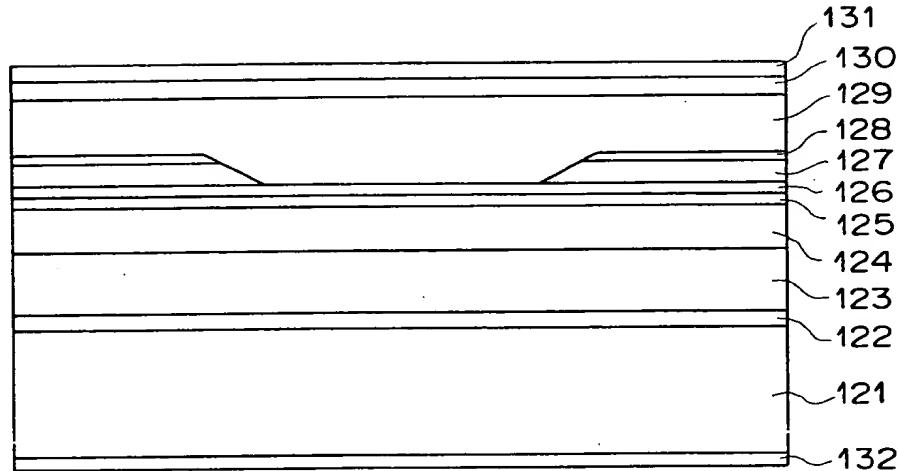


APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

HAYAKAWA..... 064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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F I G . 3

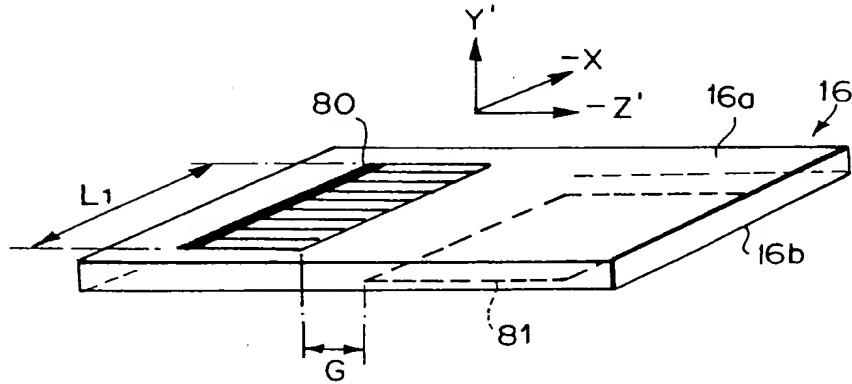
100



APPROVED	O. G. FIG.
BY	
DRAFTSMAN	

YAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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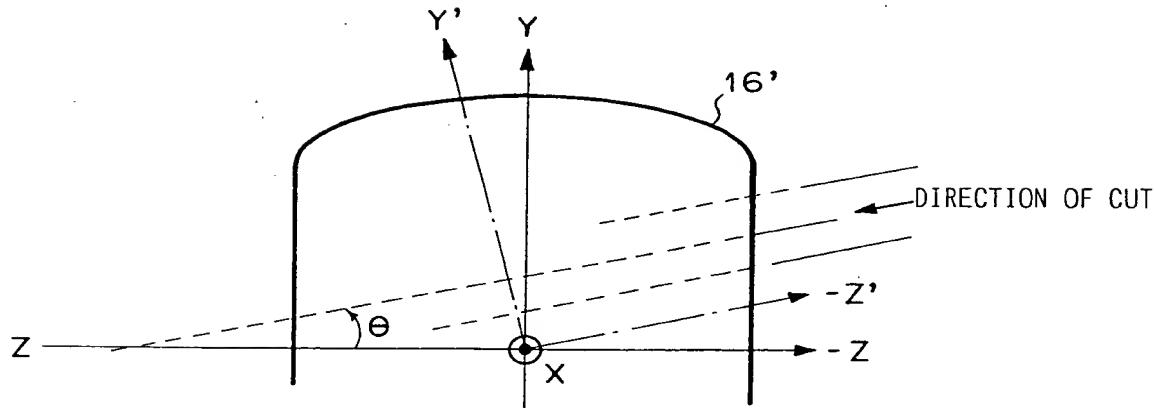
F I G . 4



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

YAKAWA..... 064226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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FIG. 5



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

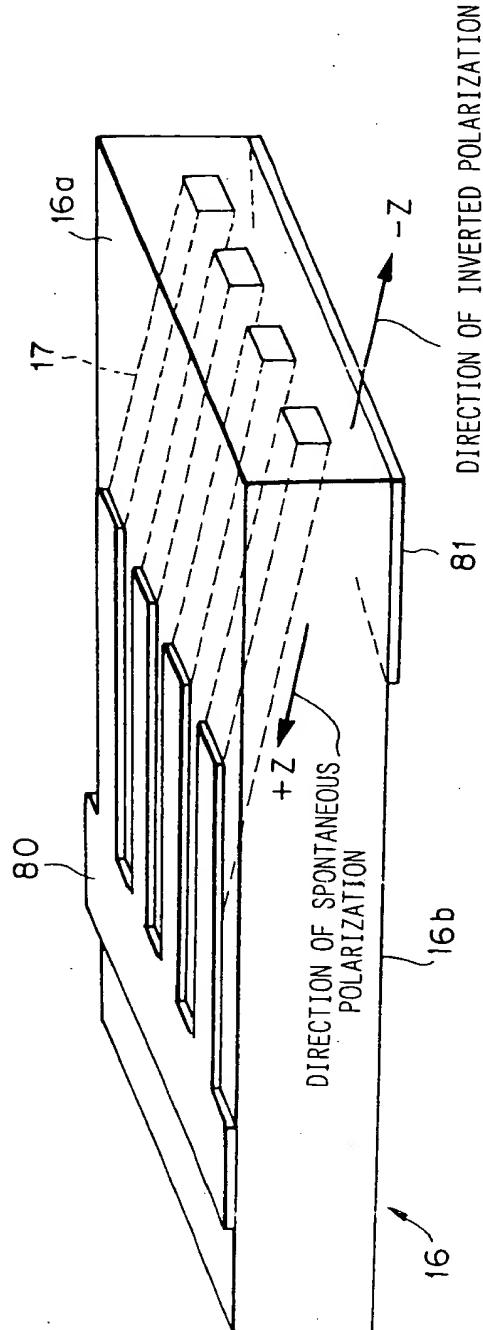
Q64226

HAYAKAWA..... SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
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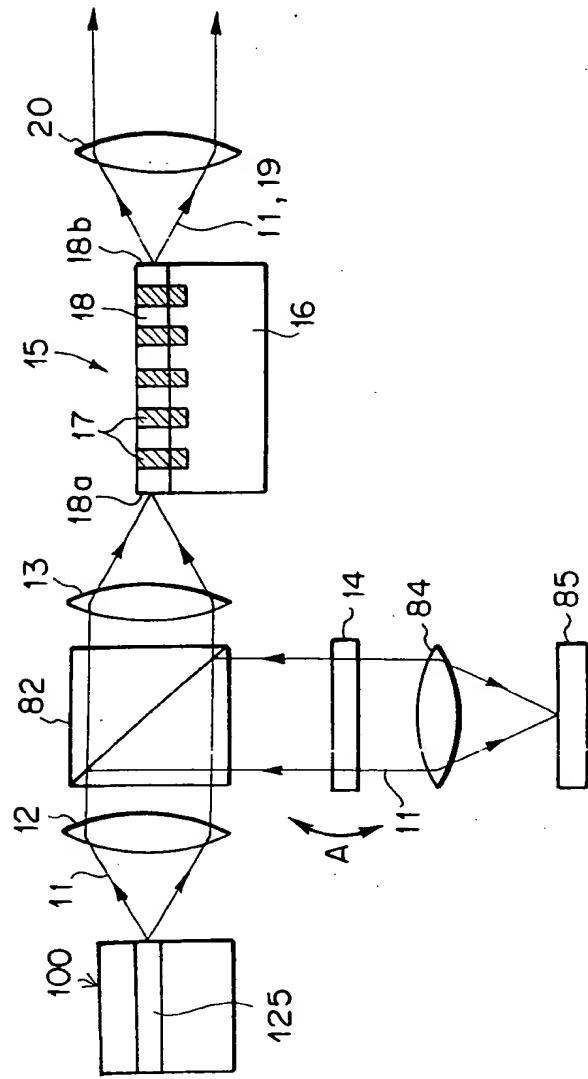
F I G . 6



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLAS

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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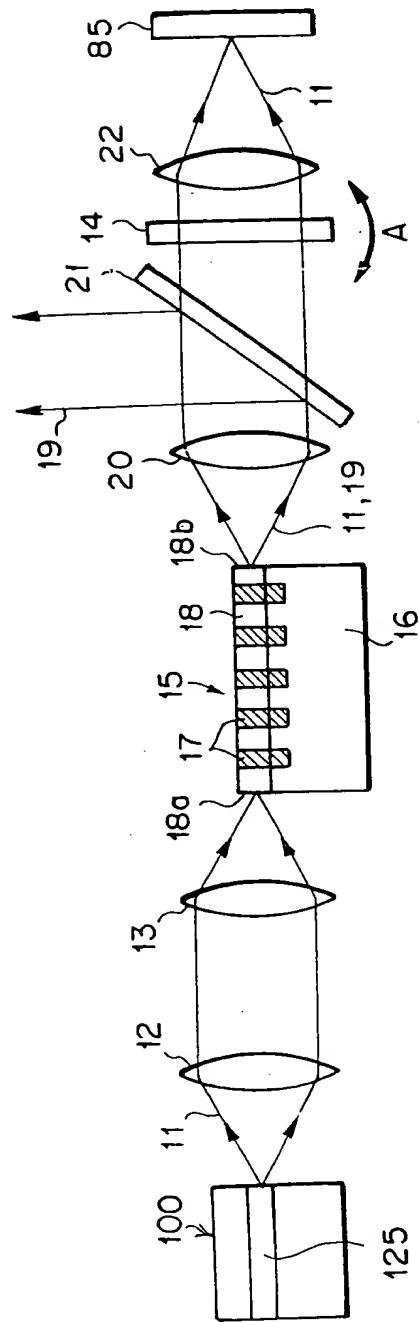
F | G . 7



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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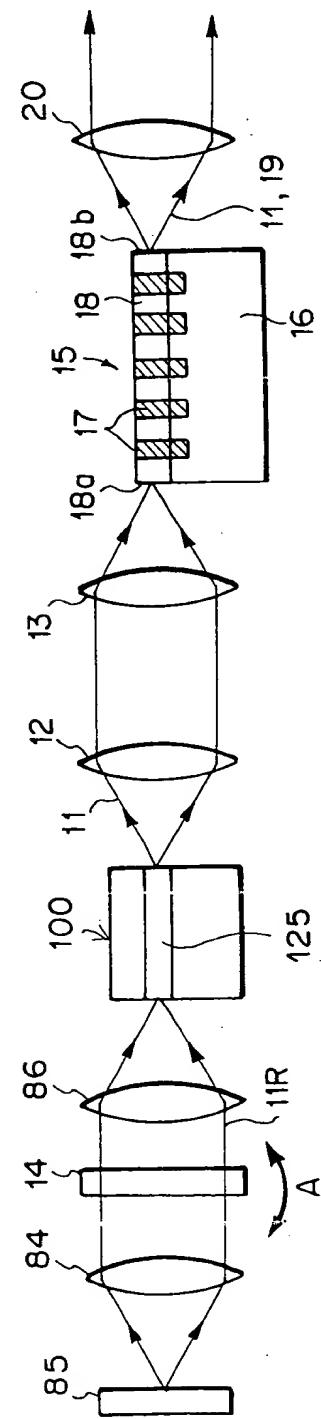
F I G . 8



APPROVED	O. G. FIG.
BY	
DRAFTSMAN	

HAYAKAWA Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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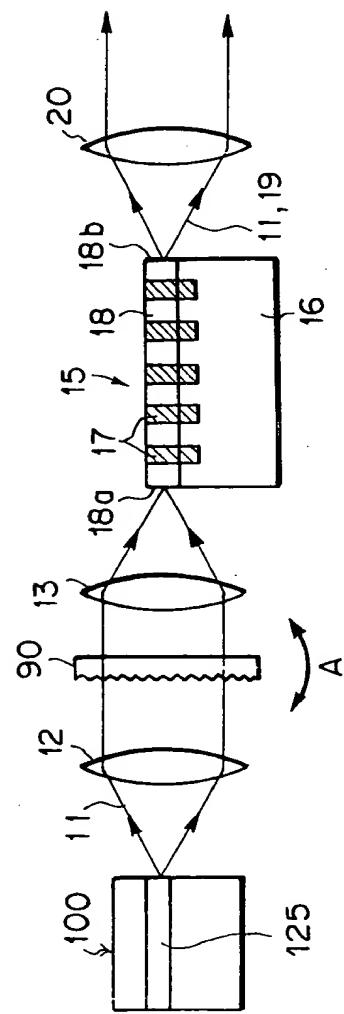
F - I G . 9



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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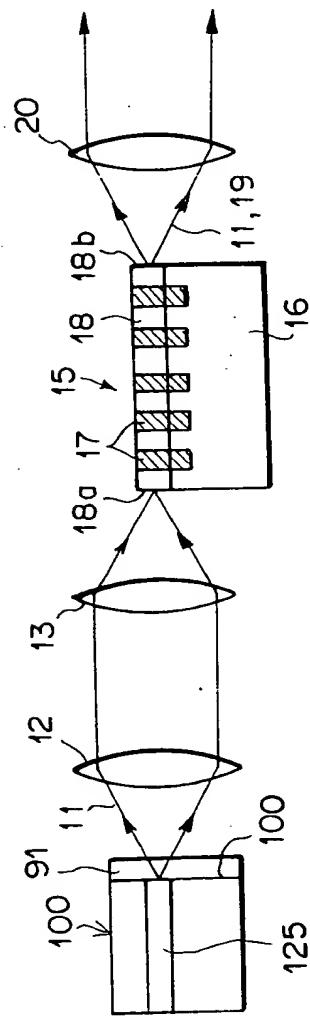
F - G . 10



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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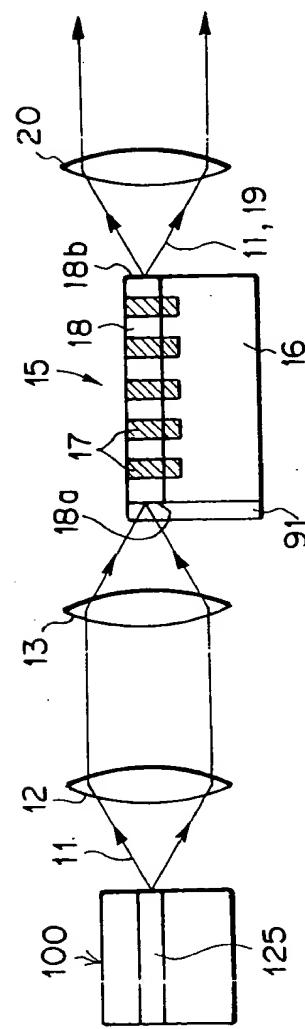
F | G . 11



APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

HAYAKAWA.....Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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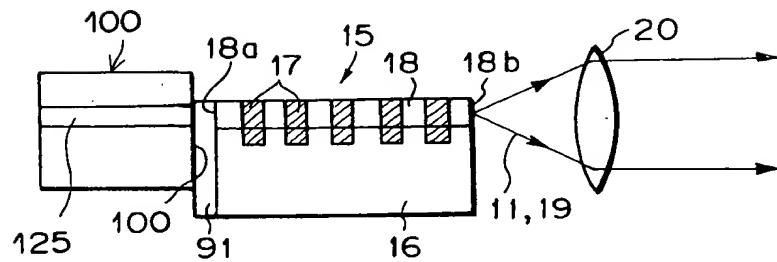
F I G . 12



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

II YAKAWA..... Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
WAVELENGTH CONVERSION ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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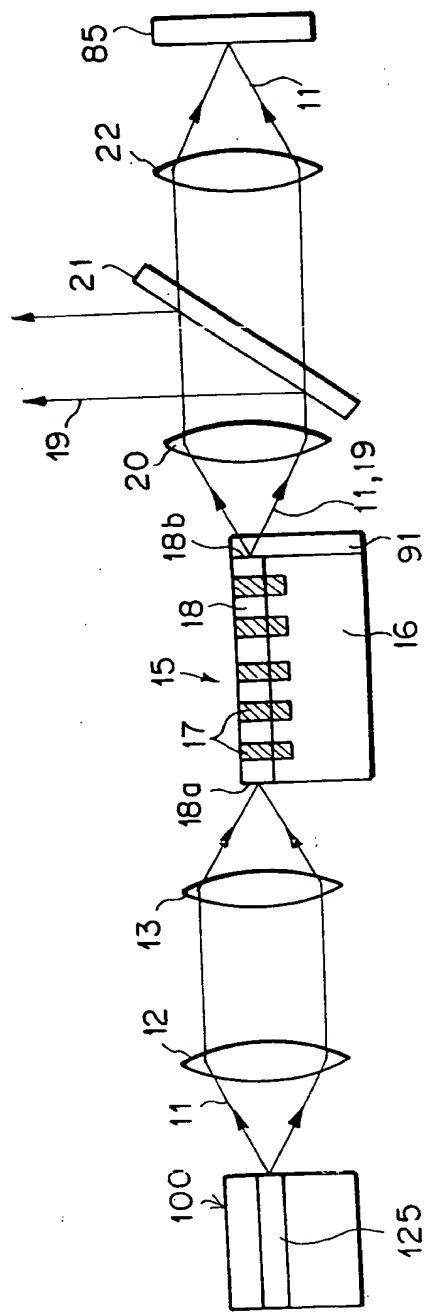
F I G : 13



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

AKAWA..... Q64226
 CONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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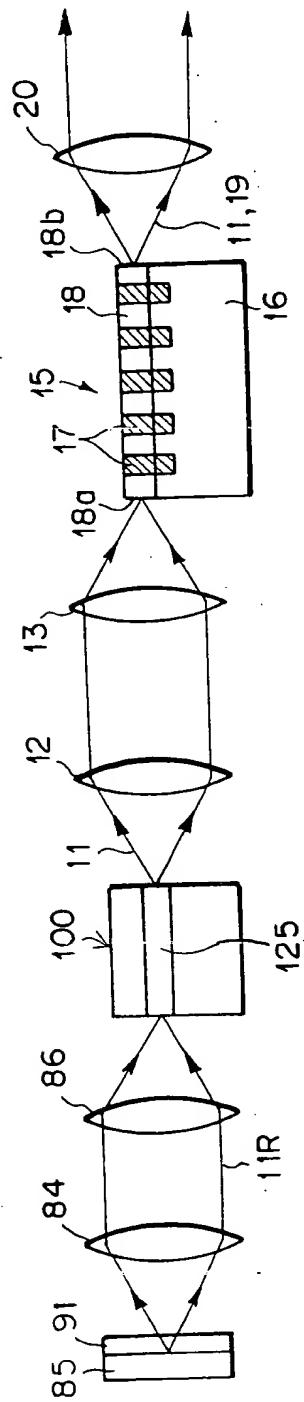
F | G . 14



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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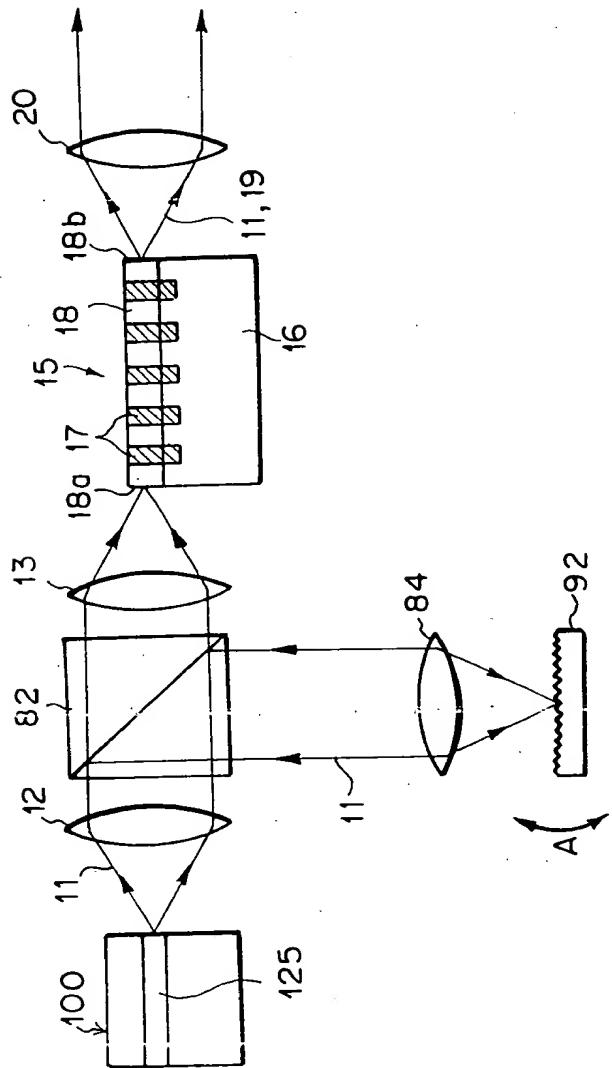
F I G . 15



APPROVED	O.G. F.R.
BY	CLASS
DRAFTSMAN	SUBCLASS

Q64226
 YAKAWA..... SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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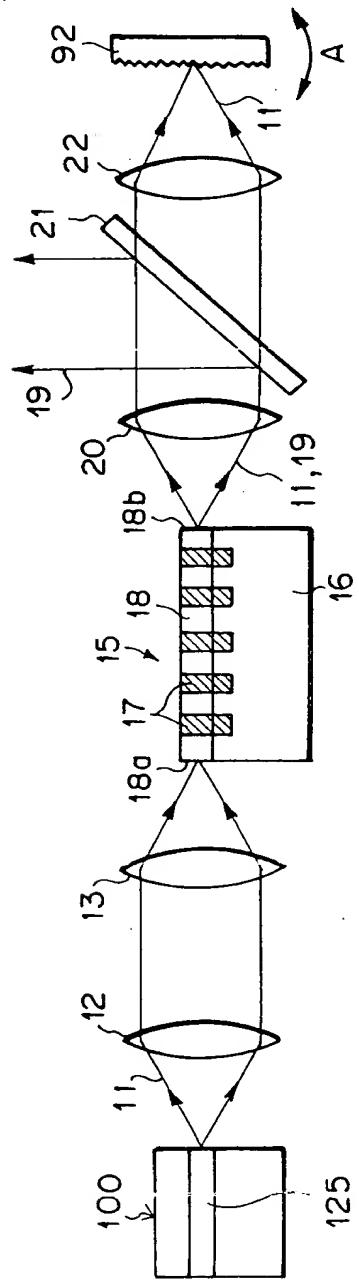
F I G . 16



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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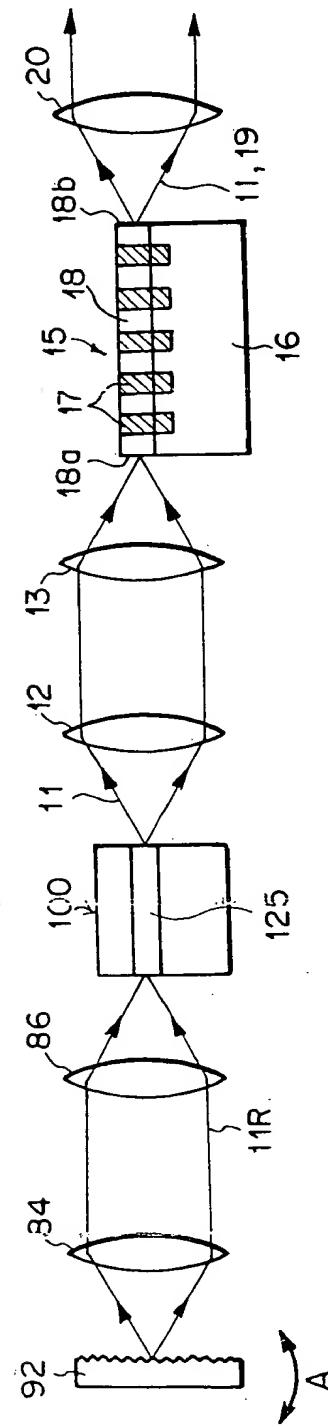
F 1 G . 17



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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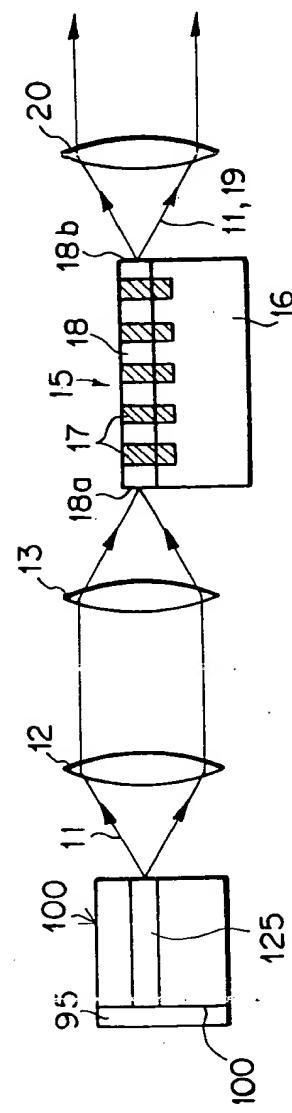
F - G . 18



APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

Q64226
 HAYAKAWA..... SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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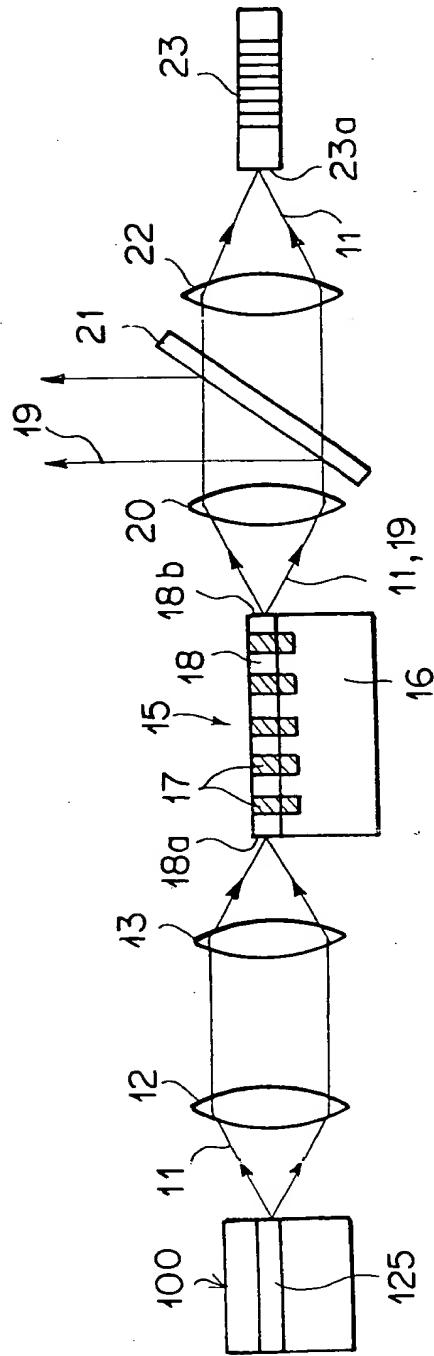
F I G . 19



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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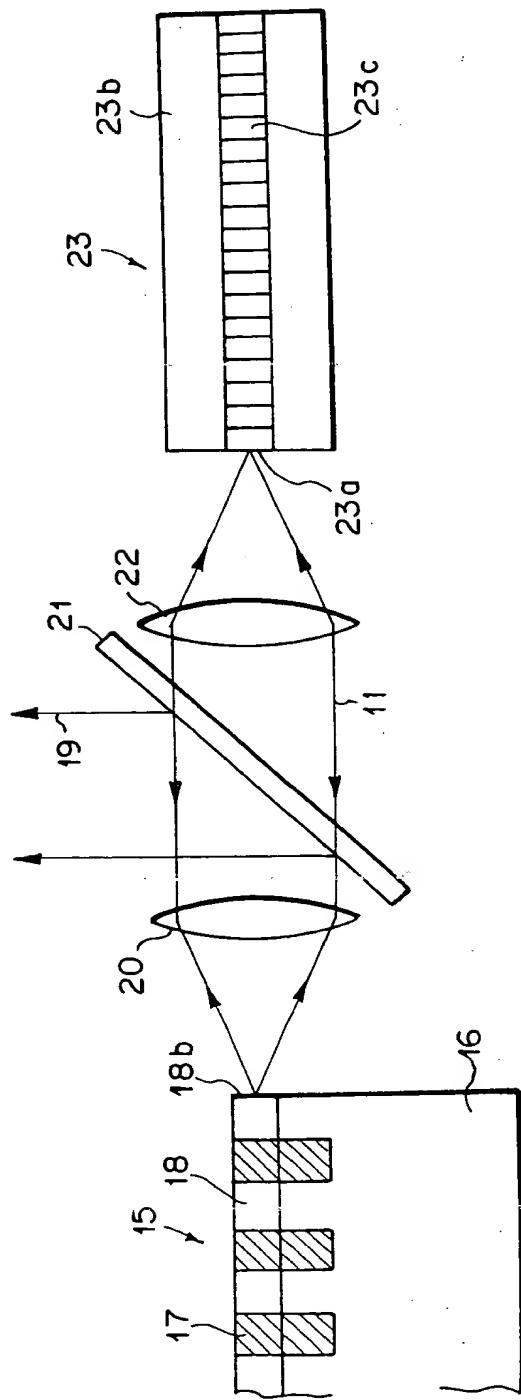
F | G . 20



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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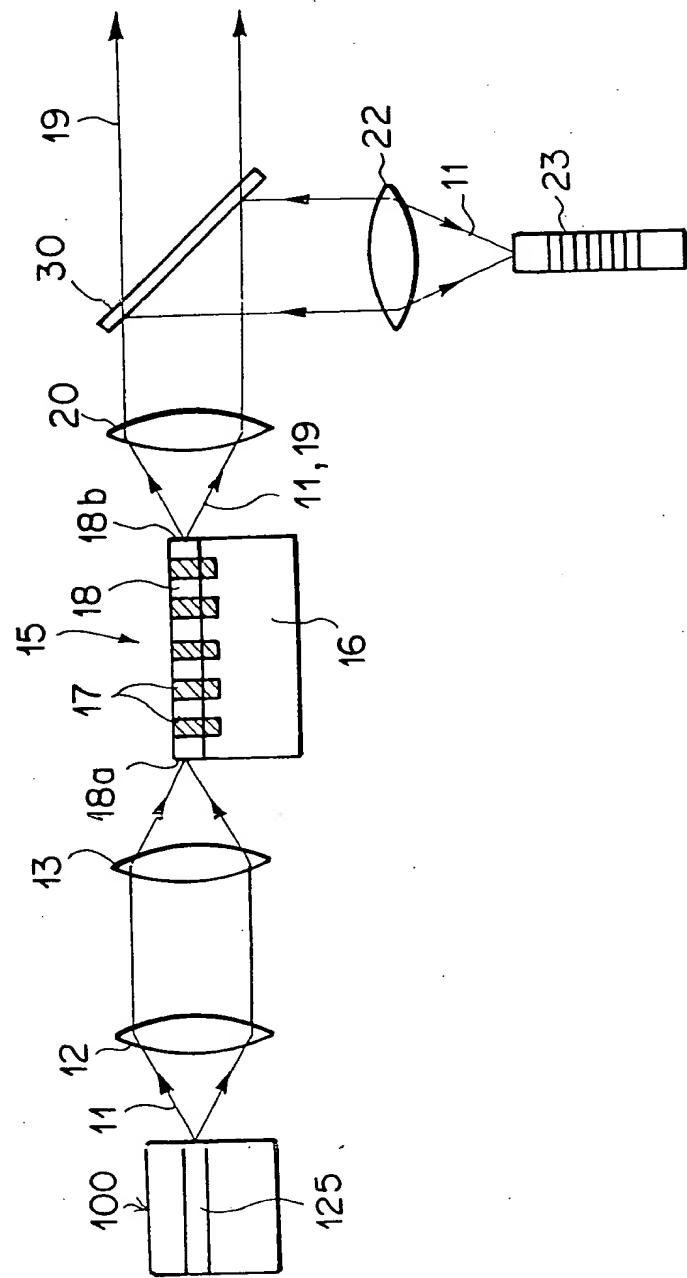
F I G . 21



APPROVED	C.G.
BY	Customer
DRAFTSMAN	

HAYAKAWA..... Q64226
MICROCONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
Filed: April 24, 2001
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F I G . 22

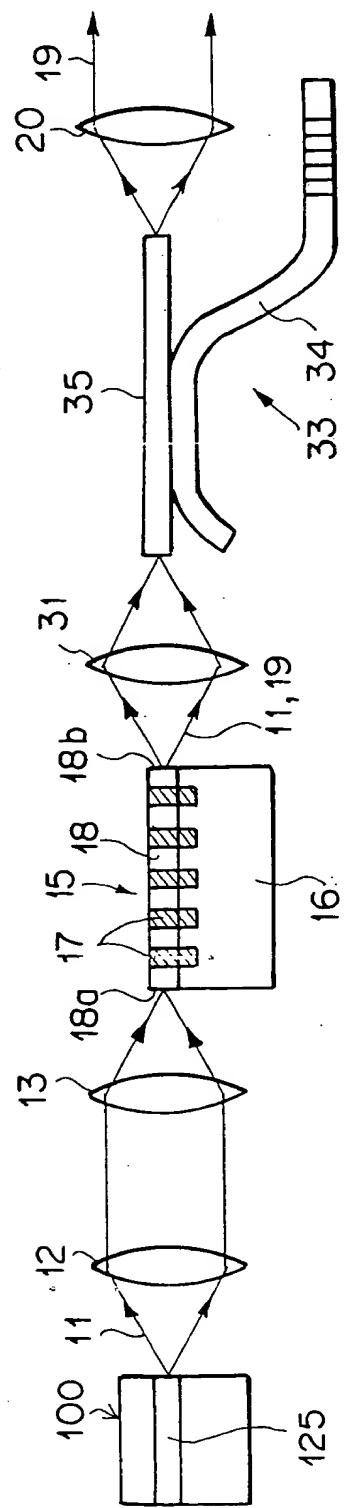


APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

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HAYAKAWA
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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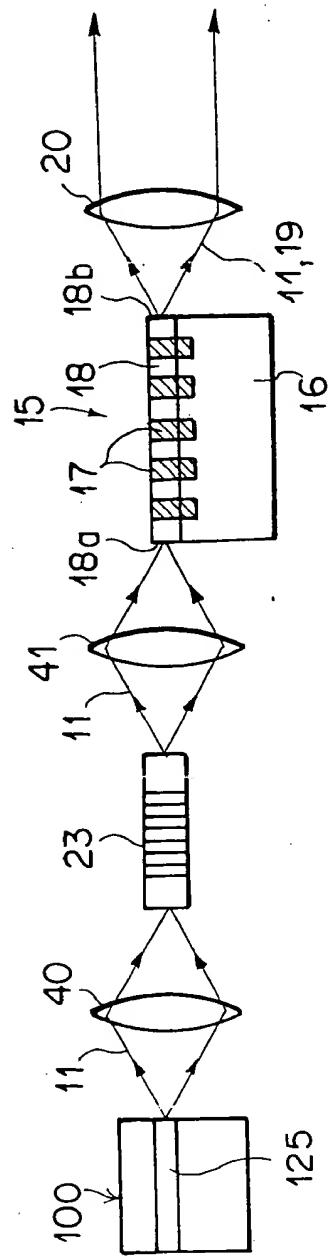
F I G . 23



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA.....Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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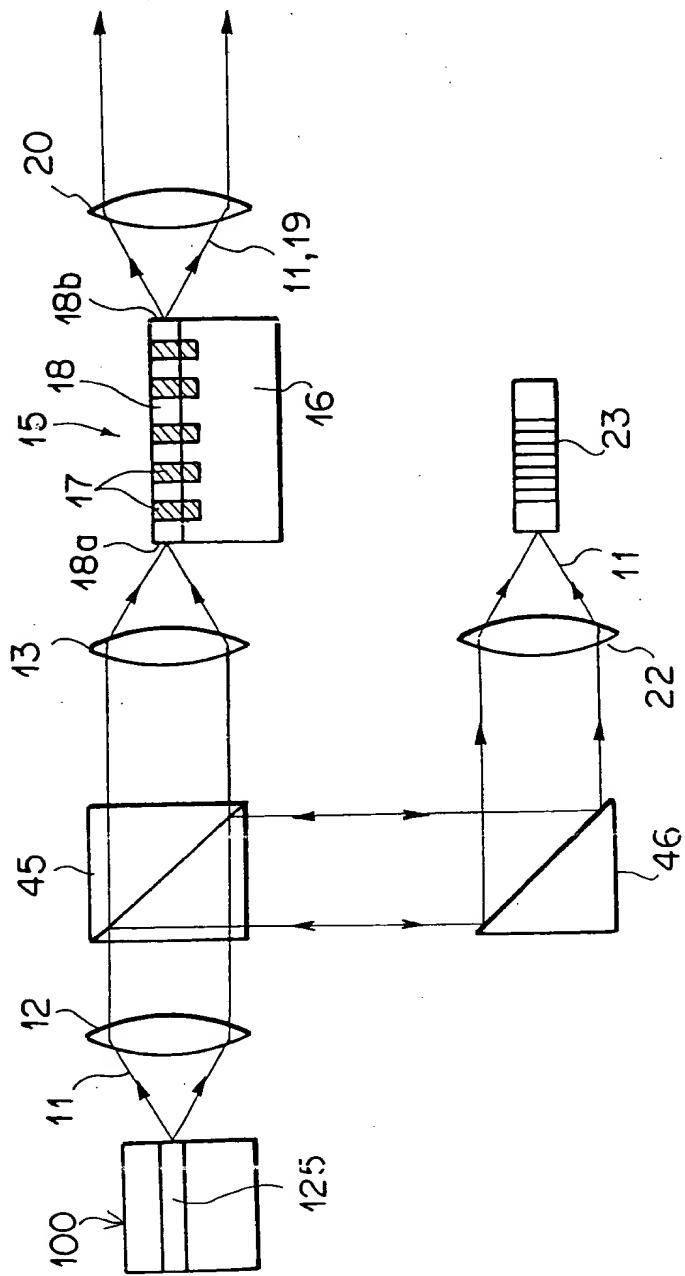
F I G . 24



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

YAKAWA.....064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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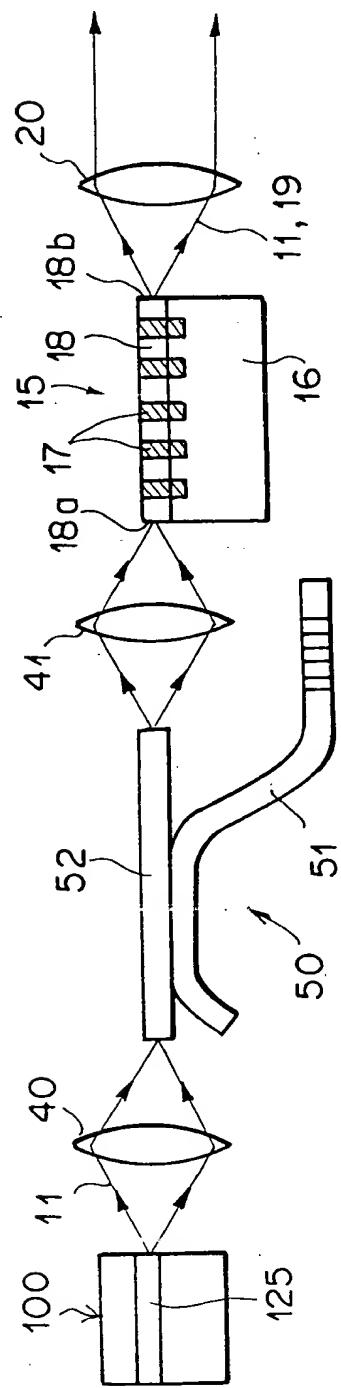
F I G . 25



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
CRAFTSMAN	"	"

HAYAKAWA..... Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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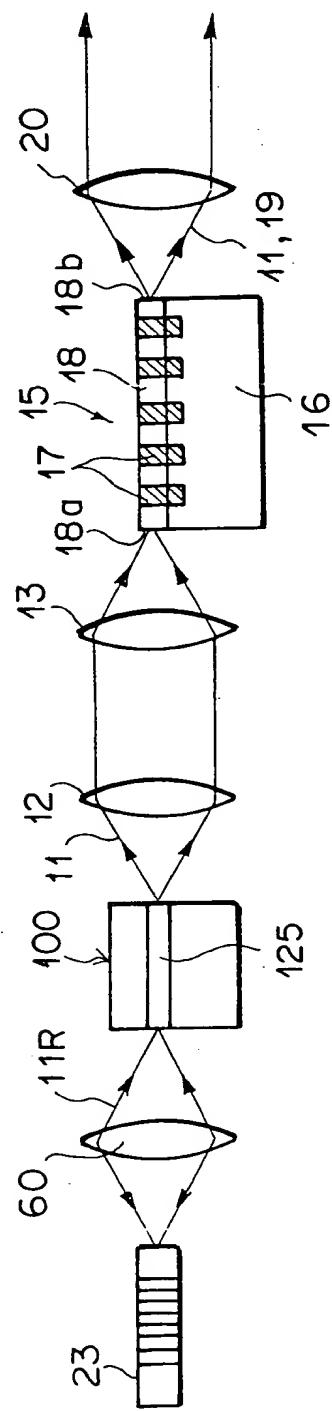
— 6 . 26



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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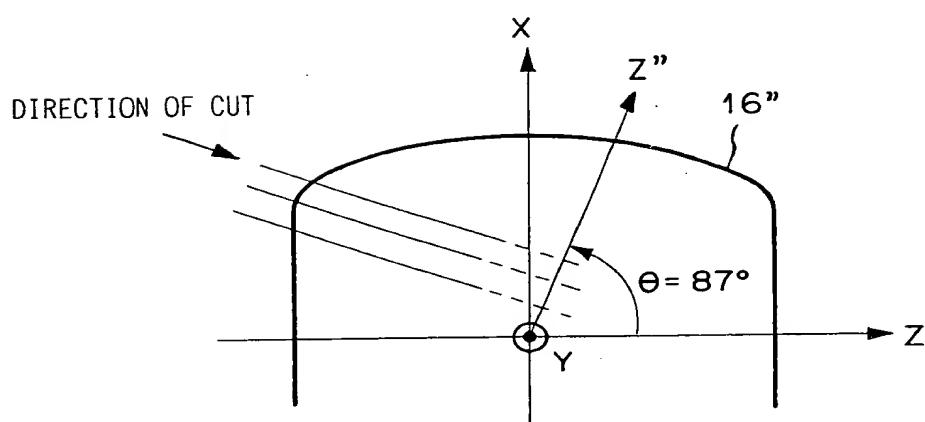
F I G . 27



APPENDIX
BY
DRAFTSMAN

HAYAKAWA..... Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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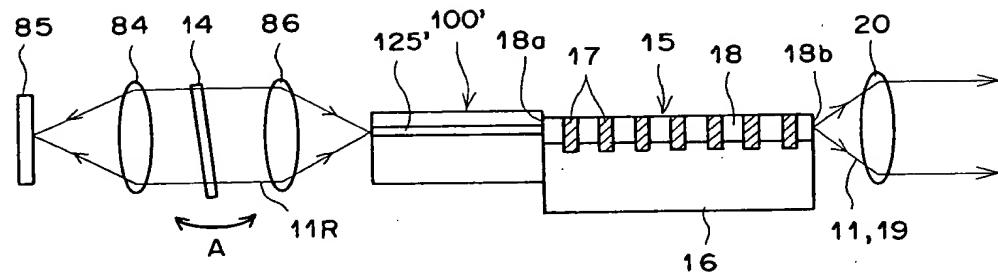
F I G . 28



APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

HAYAKAWA..... Q64226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
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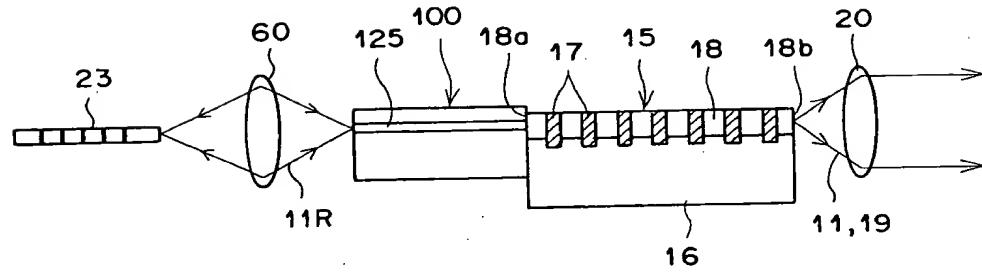
F I G . 29



APPROVED BY	O.G. FIG.
DRAFTSMAN	CLASS SUBCLASS

HAYAKAWA 064226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYER
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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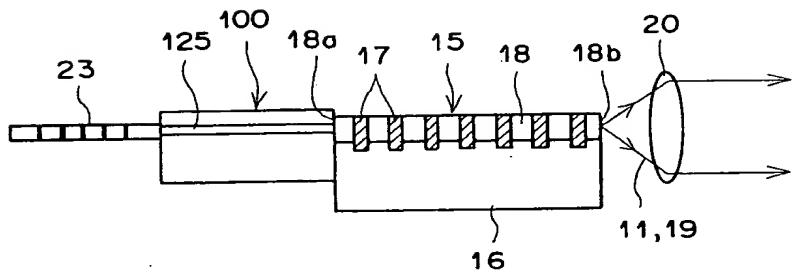
F I G . 30



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA..... 064226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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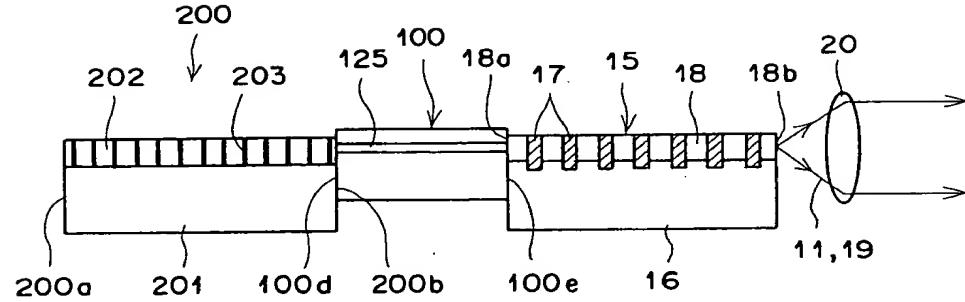
F I G . 31



APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

Q64226
 HAYAKAWA
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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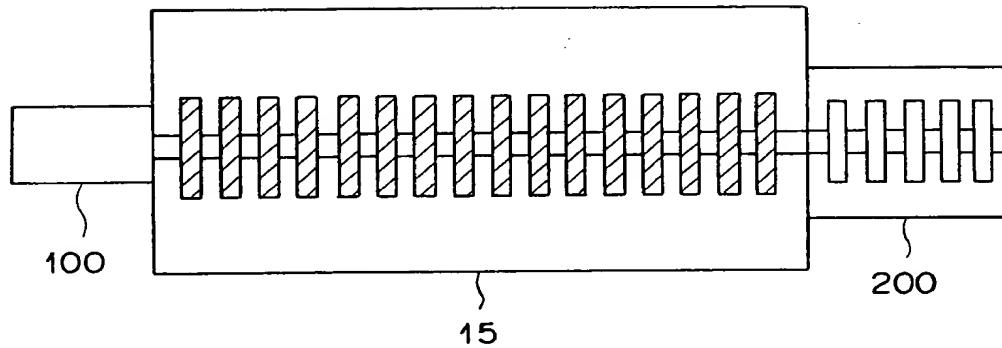
F I G . 32



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

HAYAKAWA..... Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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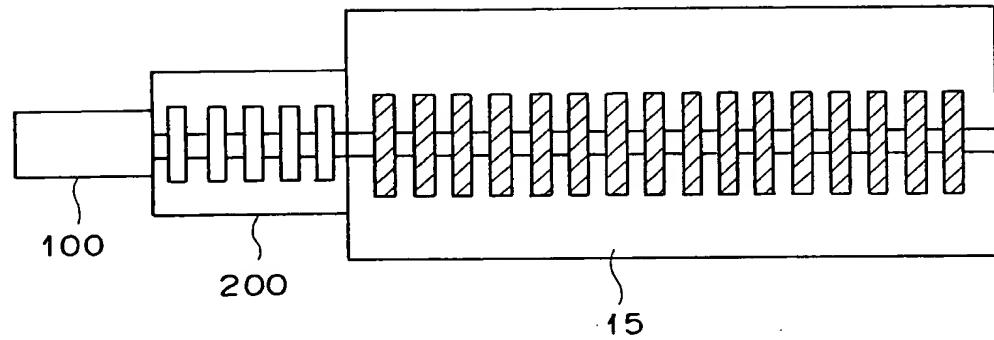
F I G . 33



APPROVED	O.G. F.
BY	CLASS SUBMITTED
DRAFTSMAN	

HAYAKAWA..... Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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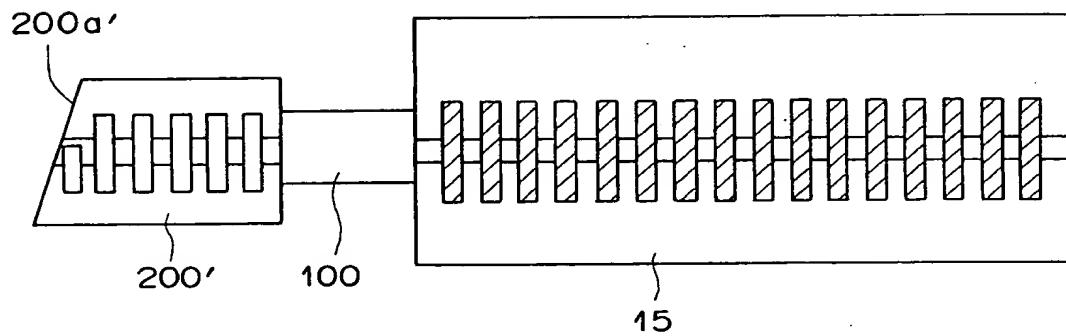
F I G . 34



APPROVED	O.G. FIG.
BY	
DRAFTSMAN	

HAYAKAWA.....Q64226
SEMICONDUCTOR LASER MODULE HAVING OPTICAL
WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
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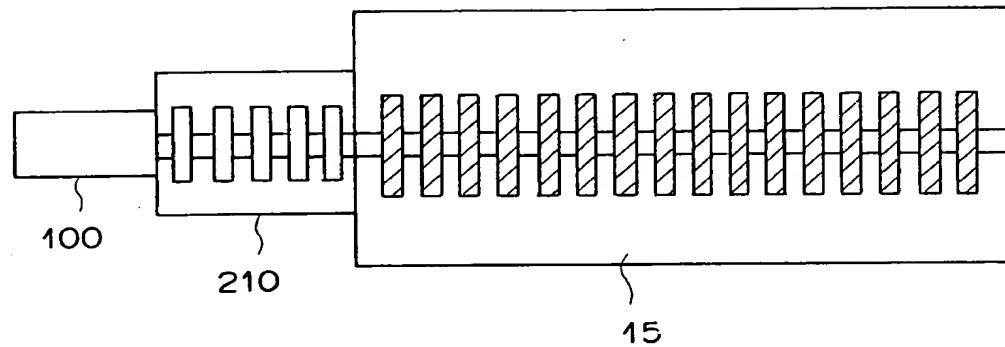
F I G . 35



APPROVED	O.G. FIG.
BY	CLASS
DRAFTSMAN	SUBCLASS

HAYAKAWA.....064226
 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
 WAVELENGTH CONVERSION ELEMENT AND SEMICONDUCTOR
 LASER ELEMENT WHICH INCLUDES QUANTUM-WELL SUBLAYERS
 HAVING DIFFERENT THICKNESSES AND/OR COMPOSITIONS
 Filed: April 24, 2001
 Darryl Mexic.....202-293-7060
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F I G . 36

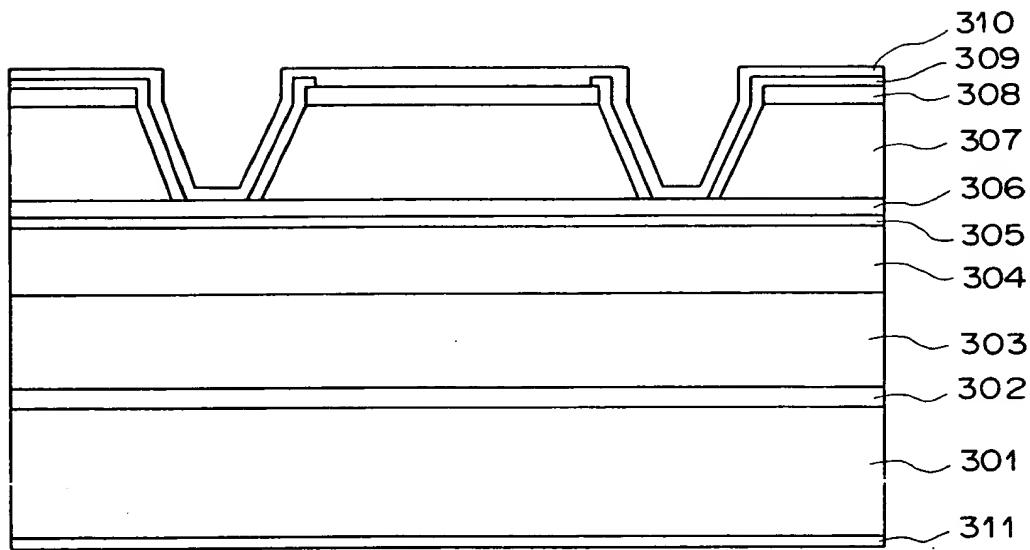


APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

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SEMICONDUCTOR LASER MODULE HAVING OPTICAL
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F I G . 37

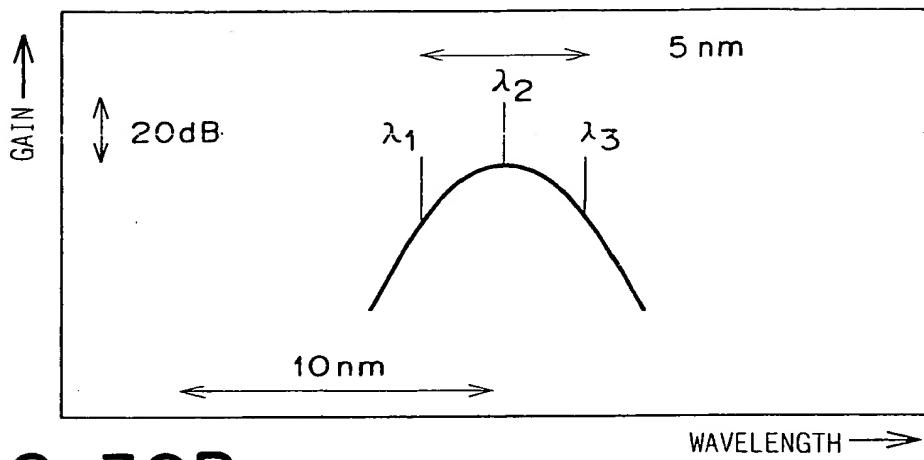
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APPROVED	O. G. FIG.
BY	
DRAFTSMAN	

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 SEMICONDUCTOR LASER MODULE HAVING OPTICAL
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F I G . 38A



F I G . 38B

